FEB 1 5 2002 W

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#### PATENT APPLICATION

FEB 20 2002 THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of

Keiji TAKAHASHI et al.

Application No.: 09/885,163

Filed:

June 21, 2001

Docket No.:

111295

3/21/02

For:

VOLTAGE REGULATOR FOR VEHICLE AC GENERATOR

### SUBMISSION OF POWER OF ATTORNEY BY ASSIGNEE

Director of the U.S. Patent and Trademark Office Washington, D.C. 20231

Sir:

Enclosed is a Power of Attorney by Assignee to be made of record in the aboveidentified application.

In the event of any nonpayment or improper payment of a required fee, the Director is authorized to charge or to credit OLIFF & BERRIDGE, PLC Deposit Account No. 15-0461 as required to correct the error.

Respectfully submitted,

James A. Oliff

Registration No. 27,075

Thomas J. Pardini

Registration No. 30,411

JAO:TJP/kaw

Date: February 15, 2002

OLIFF & BERRIDGE, PLC P.O. Box 19928 Alexandria, Virginia 22320 Telephone: (703) 836-6400 DEPOSIT ACCOUNT USE
AUTHORIZATION
Please grant any extension
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#### POWER OF ATTORNEY BY ASSIGNEE

Director of the U.S. Patent and Trademark Office Washington, D.C. 20231

Sir:

Denso Corporation is the Assignee of the entire right, title and interest in the patent applications identified in the attached Appendix A by virtue of Assignments recorded at the locations identified in the Appendix. Additionally, Denso Corporation is the Assignee of the entire right, title and interest in the following seven patent applications for which Assignments have been filed, but the original Assignments, indicating the dates and reel and frame numbers of recordation, have not yet been returned:

U.S. Patent Application No.	Filed	Inventors
09/879,035	June 13, 2001	Hironao YAMAGUCHI
09/885,163	June 21, 2001	Kciji TAKAHASHI et al.
09/912,301	July 26, 2001	Nakato MURATA et al.
09/918,826	August 1, 2001	Masami NIIMI et al.
09/922,691	August 7, 2001	Tadatoshi ASADA
09/903,494	July 13, 2001	Naoto IWATA et al.
09/873,410	June 5, 2001	Shigenobu NAKAMURA

Copies of the Recordation Cover Sheets and executed Assignments as filed for these applications are attached hereto.

The undersigned is authorized to act on behalf of Denso Corporation; has reviewed the evidentiary documents in the chain of title; and certifies that to the best of the Assignee's knowledge and belief, title is in the Assignee.

Denso Corporation hereby revokes all prior powers of attorney and appoints the following as attorneys of record with full power of substitution and revocation to prosecute this

application and all continuations and divisions thereof; and to transact all business in the Patent and Trademark Office:

James A. Oliff, Registration No. 27,075;
William P. Berridge, Registration No. 30,024;
Kirk M. Hudson, Registration No. 27,562;
Thomas J. Pardini, Registration No. 30,411;
Edward P. Walker, Registration No. 31,450;
Robert A. Miller, Registration No. 32,771;
Mario A. Costantino, Registration No. 33,565;
Stephen J. Roe, Registration No. 34,463;
Joel S. Armstrong, Registration No. 36,430;
Christopher W. Brown, Registration No. 38,025;
Richard E. Rice, Registration No. 31,560; and
Paul Tsou, Registration No. 37,956.

ALL CORRESPONDENCE IN CONNECTION WITH THIS APPLICATION SHOULD BE SENT TO OLIFF & BERRIDGE, PLC, P.O. BOX 19928, ALEXANDRIA, VIRGINIA 22320. TELEPHONE: (703) 836-6400.

February 14, 2002

Signature Signature

Typed Name: Masashi Kamiya

Title: General Manager

### APPENDIX A

U.S. Patent Application Serial No.	Filed	Oliff & Berridge, PLC Docket No.	Reel/Frame No.
09/538,983	March 30, 2000	111267	010661/0135
09/758,169	January 12, 2001	111277	011460/0868
09/777,699	February 7, 2001	111281	011540/0141
09/788,426	February 21, 2001	111282	011558/0650
09/837,382.	April 19, 2001	111287	011706/0632
09/849,274	May 7, 2001	111290	011784/0710
09/878,247	June 12, 2001	111291	011900/0317
09/883,204	June 19, 2001	111293	011917/0398
09/883,205	June 19, 2001	111294	011916/0601
09/899,054	July 6, 2001	111297	011965/0421
09/935,695	August 24, 2001	111307	012120/0029
09/940,648	August 29, 2001	111310	012126/0801
09/940,797	August 29, 2001	111311	012126/0951
09/948,581	September 10, 2001	111313	012163/0692
09/949,753	September 12, 2001	111314	012163/0229
09/950,057	September 12, 2001	111315	012201/0554
09/808,364	March 15, 2001	111316	011612/0898
09/935,696	August 24, 2001	111318	012120/0318
09/599,422	June 22, 2000	111327	010896/0961
09/803,979	March 13, 2001	111332	011603/0287
09/960,735	September 24, 2001	111334	012206/0462

U.S. Patent Application Serial No.	Filed	Oliff & Berridge, PLC Docket No.	Reel/Frame No.
09/521,604	March 9, 2000	111336	010631/0795
09/574,451	May 19, 2000	111337	010816/0493
09/891,349	June 27, 2001	111344	012241/0693
09/773,262	February 1, 2001	111348	012238/0216

RECORDATION FO	ORM COVER SHEET DNS & PATENTS ONLY
I TO THE ASSISTANT COMMISSIONER OF PATENTS AND TR	ADEMARKS:
SIR: PLEASE RECORD THE ATTACHED ORIGINAL DOCUME	NTS OR COPY THEREOF
I I MAINE OF CONVEYING PARTY(IES) (ASSIGNORS(S))	FRE 20 2002
TI. HIRONAO YAMAGUCHI / &	2.
3. FEB 1 5 2002 L	2. 4. TECHNOLUGY CENTER 2800
5.	6.
7.	8.
ADDITIONAL NAME(S) OF CONVEYING PARTY (IES) ATTACH	ED? TYES NO
2. PARTY(IES) (ASSIGNEE(S)) RECEIVING INTEREST:	
NAME: DENSO CORPORATION	
ADDRESS: 1-1, Showa-cho, Kariya-city, Aichi-pref., 448-8661 J.	APAN
ADDITIONAL NAME(S) & ADDRESS(ES) ATTACHED? YES	. ⊠NO
3. NATURE OF CONVEYANCE (DOCUMENT).	
(Submit herewith only one document for recordation—multiple	e copies of same Assignment signed by different inventors is one
1	serves of same yield minimum signed by different inventors is one
SASSIGNMENT OF SWHOLE SPART INTE	REST EXEC. DATE: June 1, 2001
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4.5 APPL. NO.(S) OR PAT NO.(S). OTHERS ON ADDITIONAL	SHEET(S) attached? ☐ YES ☒ NO
A. PAT. APP. NO.(S) M# 1st INVENTOR Series code/serial no if not in item 1	B. PATENT NO(S) M# 1st INVENTOR
NEW APPLICATION   281387	if not in item 1
5. Name & Address of Party to Whom Correspondence	6. NUMBER INVOLVED:
Concerning Document Should be Mailed:	APPLNS 1 + PATS 0 = TOTAL  1
Pillsbury Winthrop LLP	
Intellectual Property Group	7. AMOUNT OF FEE ENCLOSED: (Code 581) ABOVE TOTAL x \$40 = \$40
1100 New York Avenue, NW	70012 10172 x \$40 = \$40
Ninth Floor	
Washington, DC 20005-3918	
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Signature Attorney: Paul T. Bowen	
Reg. No. 38009	
	Date: June 13, 2001
Atty/Sec: PTB/mjb TEL: (202) 861-3014	FAX: (202) 822-0944

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I TO THE ASSISTANT COMMISSIONER OF PATENTS AND TE	ONS & PATENTS ONLY RADEMARKS:
SIR: PLEASE RECORD THE ATTACHED ORIGINAL DOCUME	NTS OR COPY THEREOF.
1. NAME OF CONVEYING PARTY(IES) (ASSIGNORS(S)): 1. Keiji TAKAHASHI	10000
3. Makoto TANIGUCHI	2. Toshinori MARUYAMA LEGARDLOGY GEHTER 2800
. /	6.
5. 7. ADDITIONAL MANT(S) OF COMMENT OF FEB 1 5 2002	8
ADDITIONAL NAME(S) OF CONVEYING PARTY(IES) ATTACH	IED? ☐YES ⊠NO
2. PARTY(IES) (ASSIGNEE(S)) RECEIVING ANTIEREST:	· · · · · · · · · · · · · · · · · · ·
NAME: DENSO CORPORATION	
ADDRESS: 1-1 Showa-cho, Kariya-city, Aichi-pref., 448-8661 JA	NPAN .
ADDITIONAL NAME(S) & ADDRESS(ES) ATTACHED? YES	S ⊠NO
3. NATURE OF CONVEYANCE (DOCUMENT): (Submit herowith only and document for the converse of the	
document)	e copies of same Assignment signed by different inventors is one
SASSIGNMENT OF SWHOLE SPART INTE	REST EXEC. DATE: May 31, 2001
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ASSIGNMENT DIFFER SEE ATTY!) May 31, 2001	
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	B. PATENT NO(S) M# 1st INVENTOR
Series code/serial no if not in item 1  NEW APPLICATION 281174	if not in item 1
5. Name & Address of Party to Whom Correspondence	6. NUMBER INVOLVED:
Concerning Document Should be Mailed:	APPLNS 1 + PATS 0 = TOTAL 1
Pillsbury Winthrop LLP	
Intellectual Property Group	7. AMOUNT OF FEE ENCLOSED: (Code 581)
1600 Tysons Boulevard	ABOVE TOTAL x \$40 = \$40
McLean, VA 22102	
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Attorney: Paul T. Bowen	
Reg. No. 38009	Date: June 21, 2001
Atty/Sec: PTB/mjb TEL: (703) 905-2020	FAX: (703) 905-2500



Pillsbury Winthrop LLP Intellectual Property Group 1100 New York Avenue, NW Ninth Floor Washington, DC 20005-3918

USA Patent Appln. Sole or Joint Inventions made outside USA

executed with or after application.

Atty. Dkt, PW 56600-US-AK/nh

M# Client Ref.

NONPROVISIONAL

## ASSIGNMENT OF NONPROVISIONAL APPLICATION

the undersigned, to	n consideration of the sum of Ten Dollars (\$10 wit:	.00) and other good and va	aluable consideration paid to eacl	h of
INSERT	(1) Hironao YAMAGUCHI	(2		
NAME(S) OF	(3)	(4	<u> </u>	
INVENTOR(S)	(5)		x box if continued on page 2	
the receipt and suff and transfer(s) unto	ficiency of which are hereby acknowledged by	the undersigned who at th		
INSERT NAME(S) OF ASSIGNEE(S)	DENSO CORPORATION 1-1, Showa-cho, Kariya-city, Aichi-pref., 448	3-8661 Japan		1
& ADDRESS(ES)			·	
100			<u> </u>	
	SSIGNEE*) the entire right, title and interest for the United State nuations, substitutes, and reissues thereof; and all resulting pat	es of America as defined in 35 U.S.C ents, known as	. 100, in the invention and all applications inc	cluding
TITLE OF INVENTION	TRANSFORMER DEVICE, HIGH-VOLTAG	E GENERATING APPARA	ATUS	
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NOTE → → (Complete	for which the undersigned executed an appl  (A)   even date herewith  (B)   on	ication for Letters Patents	of the United States of America:	*
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hereinafter act on behalf of All essential by ASSIGNEE to	ND the undersigned hereby agree(s) to testify and execute any ASSIGNEE'S full protection and title in and to the invention here undersigned hereby authorize(s) Pillsburg Wighten LLP of the	papers for ASSIGNEE, its successor	nat the attorney of record in said application s rs, assigns and legal representatives, deemed	shall d
1): <u>INVEN</u>	TORS	DATE SIGNED	WITNESSES	•
Name: Hirona	ironao Yamaguchi	June 1, 2001	Yoshitaka S	ata
2)	I TAMAGOOTII		<b>/</b>	
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Pillsbury Winthrop LLP Intellectual Property Group 1100 New York Avenue, NW Ninth Floor Washington, DC 20005-3918

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For Inventions made outside USA executed with or after application Atty. Dkt. PW 56656-US Client Ref.

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## **ASSIGNMENT**

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INSERT	(1) Keiji TAKAHASHI	(2	) Toshinori MARUYAMA
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(hereinafter design any and all division TITLE OF INVENTION	nated "ASSIGNEE") the entire right, title and interest for the United States ns, continuations, substitutes, and reissues thereof; and all resulting patern VOLTAGE REGULATOR OF VEHI	is, known as	· · · · · · · · · · · · · · · · · · ·
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	AND the undersigned hereby authorize(s) and request(s) the Unite or its interest as ASSIGNEE, its successors, assigns and legals represent behalf of said ASSIGNEE;  AND the undersigned hereby agree(s) to testify and execute any passible to ASSIGNEE'S full protection and title in and to the invention hereby authorize(s) Pillsbury Winthrop LLP of the document.	pers for ASSIGNEE, its successory transferred	at the attorney of record in said application shall s, assigns and legal representatives, deemed
	NVENTORS	DATE SIGNED	WITNESSES
1): k	Keiji TAKAHASHI	May /31 /200/	······
Name:	Keiji TAKAHASHI		140 COEM SEZNICO
	Toshinori Maruyama	May/31/2001	
Name:	Toshinori MARUYAMA		
	makoto Panizuchi	may /31/2001	Heroshi Shida
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PATENT APPLICATIONS & PATENTS ONLY  TO THE ASSISTANT COMMISSIONER OF PATENTS AND TRADEMARKS:							
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	<u>// \                               </u>	uly 12, 2001 and (3)	) July 13, 2001				
4.5 APPL. NO.(S) OR PAT NO.	(S). OTHERS	ON ADDITIONAL S	SHEET(S) attach		]YES [≥	NO	
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4.5 APPL. NO.(S) OR PAT NO.  A. PAT. APP. NO.(S) M#  series code/serial no  NEW APPLICATION 02827	.(S). OTHERS	ON ADDITIONAL S  1** INVENTOR  if not in item 1	SHEET(S) attach			₫NO	1st INVENTOR If not in Item 1
4.5 APPL. NO.(S) OR PAT NO.  A PAT. APP. NO.(S) M#  series code/serial no  NEW APPLICATION 02827  5. Name & Address of Party to	.(S). OTHERS 704 Whom Corresp	ON ADDITIONAL S  1** INVENTOR  if not in item 1	SHEET(S) attach	O(S)   I	M#	₫NO	
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4.5 APPL. NO.(S) OR PAT NO.  A PAT. APP. NO.(S) M# series code/serial no  NEW APPLICATION 02827  5. Name & Address of Party to Concerning Document Should Pillsbury Winthrop LLP Intellectual Property Group	.(S). OTHERS 704 Whom Corresp	ON ADDITIONAL S  1** INVENTOR  if not in item 1	SHEET(S) attach  B. PATENT NO  6. NUMBER	INVOLV + PATS	M# /ED: S <u>0</u> = T	OTAL	If not in Item 1.
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4.5 APPL. NO.(S) OR PAT NO.  A PAT. APP. NO.(S) M# series code/serial no  NEW APPLICATION 02827  5. Name & Address of Party to Concerning Document Should Pillsbury Winthrop LLP Intellectual Property Group 1600 Tysons Boulevard	.(S). OTHERS 704 Whom Corresp	ON ADDITIONAL S  1** INVENTOR  if not in item 1	B. PATENT NO  6. NUMBER APPLNS 1  7. AMOUNT O	INVOLV + PATS	M# /ED: S <u>0</u> = T	OTAL	If not in Item 1.
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4.5 APPL. NO.(S) OR PAT NO.  A PAT. APP. NO.(S) M# series code/serial no  NEW APPLICATION 02827  5. Name & Address of Party to Concerning Document Should Pillsbury Winthrop LLP Intellectual Property Group 1600 Tysons Boulevard  McLean, VA 22102  5.5 ATTY DKT:  P 0282704	704 Whom Corresputed be Mailed:	ON ADDITIONAL S  1st INVENTOR  If not in item 1  pondence  US-SuS/mk	6. NUMBER APPLNS 1 7. AMOUNT O ABOVE TOTO	O(S) INVOLV I + PATS OF FEE E TAL x \$4	M# /ED: S <u>0</u> = T ENCLOS 40 = \$40  SSING O DEPOSIT 03	OTAL SED: (Code PR INADEQ ACCOUN 80954	1 e 581)  UATE CHARGE T NUMBER: 03-3975 0282704
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4.5 APPL. NO.(S) OR PAT NO.  A PAT. APP. NO.(S) M# series code/serial no  NEW APPLICATION 02827  5. Name & Address of Party to Concerning Document Should Pillsbury Winthrop LLP Intellectual Property Group 1600 Tysons Boulevard  McLean, VA 22102  5.5 ATTY DKT:  P 0282704	704 Whom Corresputed be Mailed:	ON ADDITIONAL S  1st INVENTOR  If not in item 1  pondence  US-SuS/mk	6. NUMBER APPLNS 1 7. AMOUNT O ABOVE TOTO	O(S) INVOLV I + PATS OF FEE E TAL x \$4	M# /ED: S <u>0</u> = T ENCLOS 40 = \$40  SSING O DEPOSIT 03	OTAL SED: (Code PR INADEQ ACCOUN 80954	1 e 581)  UATE CHARGE T NUMBER: 03-3975 0282704
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4.5 APPL. NO.(S) OR PAT NO.  A PAT. APP. NO.(S) M# series code/serial no  NEW APPLICATION 02827  5. Name & Address of Party to Concerning Document Should Pillsbury Winthrop LLP Intellectual Property Group 1600 Tysons Boulevard  McLean, VA 22102  5.5 ATTY DKT:  P 0282704  MATTER NO.	704 Whom Corresputed be Mailed:  57062-L CLIE	ON ADDITIONAL S  1st INVENTOR  If not in item 1  pondence  US-SuS/mk	6. NUMBER APPLNS 1 7. AMOUNT O ABOVE TOTAL INSUFFICIEN UNDER ORDEL dup. sheet not recommend to the control of t	INVOLV  INVOLV  I + PATS  OF FEE E  TAL x \$4  EE IS MIS  NCY TO I  R NO    quired    er of pag  tachmen	##  /ED: S <u>0</u> = T  ENCLOS 40 = \$40  SSING O  DEPOSIT 03  CLIE	OTAL SED: (Code R INADEQ ACCOUN 80954 ENT NO.	1 e 581)  UATE CHARGE T NUMBER: 03-3975
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FILE WITH PTO RETURN RECEIPT (PAT-103A)

For Inventions made outside USA executed with or after application

Atty. Dkt. PW

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Client Ref.

47062-05

Pillsbury Winthrop LLP 1600 Tysons Boulevard McLean VA 22102

USA Patent Appln. Sole or Joint

NONPRO\	/ISIONAL
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## **ASSIGNMENT**

	OF NONPROVISION	NAL APPLICATION	,
the undersigned, t	In consideration of the sum of Ten Dollars (\$10 o wit:	.00) and other good and v	aluable consideration paid to each of
INSERT NAME(S) OF	(1) Nakato Murata (3) Tsutomu Shiga	(2	) Yoshiki Tan
INVENTOR(S)	(5)		x box if continued on page 2
the receipt and suf and transfer(s) unt	ficiency of which are hereby acknowledged by o:	the undersigned who at the	ne request of, hereby sell(s), assign(s)
INSERT NAME(S) OF	DENSO CORPORATION		. *
ASSIGNEE(S) & ADDRESS(ES)	1-1, SHOWA-CHO, KARIYA-CITY, AICHI-F	PREF., 448-8661 JAPAN	
(hereinafter designated "A any and all divisions, cont	SSIGNEE") the entire right, title and interest for the United State inuations, substitutes, and reissues thereof; and all resulting pat	es of America as defined in 35 U.S.(	2. 100, in the invention and all applications including
TITLE OF INVENTION	BRUSH-LESS ROTARY ELECTRIC MACHI		OLING ARRANGEMENT
NOTE → → (Complete line A, B and/or C)	for which the undersigned executed an appli  (A)  even date herewith  (B)  on  (C)  in U.S. Appln. No.	cation for Letters Patents	of the United States of America:
hereinafter act on behalf o AN essential by ASSIGNEE to	ND the undersigned hereby authorize(s) and request(s) the Unit erest as ASSIGNEE, its successors, assigns and legals represel f said ASSIGNEE; ND the undersigned hereby agree(s) to testify and execute any passing the interest of the invention here ASSIGNEE'S full protection and title in and to the invention here	ed States Commissioner of Patents ntatives; the undersigned agree(s) the	nat the attorney of record in said application shall rs, assigns and legal representatives, deemed
1):	Nakato murata	DATE SIGNED July 12. 2001	WITNESSES Broshi Sepide
2)	Murata Yeshiki Jan	July 12, 2001	Heriochi Nolida
Name: Yoshik 3) Name: Tsutom	Tan Santomu Spaga	July 13.200	Heroshi Sahida
4)			
Name: 5)			
Name:			

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RECORDATION F	ORM COVER SHEET ONS & PATENTS ONLY
TO THE ASSISTANT COMMISSIONER OF PATENTS AND TR	RADEMARKS:
SIR: PLEASE RECORD THE ATTACHED ORIGINAL DOCUME	ENTS OR COPY THEREOF.
1. NAME OF CONVEYING PARTY(IES) (ASSIGNORS(S)):	
1. Masami NIIMI	2 Hideri ICHIKAWA IPE
3. Masahiro KATOH	4. TENROLOGY DEBILE 2000
5.	
7.	8. FEB , EB
ADDITIONAL NAME(S) OF CONVEYING PARTY(IES) ATTACH	HED? ☐YES ☑NOK
7. ADDITIONAL NAME(S) OF CONVEYING PARTY(IES) ATTACH 2. PARTY(IES) (ASSIGNEE(S)) RECEIVING INTEREST:	BADEMAL
NAME: DENSO CORPORATION	
·	
ADDRESS: 1-1, Showa-cho, Kariya-city, Aichi-pref., 448-8661 JA	APAN
ADDITIONAL NAME(S) & ADDRESS(ES) ATTACHED? TYES	S 🖄 NO
3. NATURE OF CONVEYANCE (DOCUMENT):	
(Submit herewith only one document for recordation—multiple document)	e copies of same Assignment signed by different inventors is one
documenty	
	(1)
☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐	(2) June 11, 2001
SECURITY MERGER OTHER:	(3) June 6, 2001
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ASSIGNMENT DIFFER SEE ATTY!) (1) June 5, 2001; (2) June	WITH: (NOTE: IF DATES ON DECLARATION AND
4.5 APPL. NO.(S) OR PAT NO.(S). OTHERS ON ADDITIONAL S	PLEET(S) ottochod2 [VEC MINO
A. PAT. APP. NO.(S) M# 19 INVENTOR	
series code/serial no if not in item 1	B. PATENT NO(S) M# 1* INVENTOR If not in item 1
NEW APPLICATION 0281512	TOTAL PROPERTY OF THE PROPERTY
5. Name & Address of Party to Whom Correspondence	6. NUMBER INVOLVED:
Concerning Document Should be Mailed:	APPLNS 1 + PATS 0 = TOTAL 1
Pillsbury Winthrop LLP	<u></u>
Intellectual Property Group	7. AMOUNT OF FEE ENCLOSED: (Code 581) ABOVE TOTAL x \$40 = \$40
1600 Tysons Boulevard	ADOVE TOTAL X 940 - 940
McLean, VA 22102	
5.5ATTY DKT:	8. IF ABOVE FEE IS MISSING OR INADEQUATE CHARGE
P 0281512 57168-US-MRR/nh	INSUFFICIENCY TO DEPOSIT ACCOUNT NUMBER: 03-3975
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Signature Attorney: Paul T. Bowen	
Reg. No. 38009	
Atty/Sec: PTB/tel TEL: (703) 905-2020	Date: August 1, 2001
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Please return sig	ned/recorded to:			For Inventions mad	le outside USA
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the constant and	in consideration of the	sum of Ten Dollars (\$10.	00) and other good and	d valuable considera	tion paid to each of
the undersigned,	to wit:				
			*		
INSERT	(1) Masami NIIMI			(2) Hideki ICHIKAV	VA
NAME(S) OF	(3) Masahiro KAT	ОН	T)	(4)	-
INVENTOR(S)	(5)			x box if continu	ued on page 2
4	0				and on page 2
the receipt and si	ufficiency of which are I	hereby acknowledged by t	he undersigned who a	the request of here	aby soli(s) assign(s)
and transfer(s) u	nto:	in any demineration of the	no dilucioligilod milo a	it the request of, field	eby seli(s), assign(s)
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INSERT	DENSO CORPOR	ATION			
NAME(S) OF		ariya-city, Aichi-pref., 448	9664 1		
ASSIGNEE(S)	1-1, OHOWA-CHO, N	anya-city, Alchi-prei., 446	-ooo i Japan	<del></del>	· · · · · · · · · · · · · · · · · · ·
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& ADDRESS(ES)					
	*				
(hereinafter designated	"ASSIGNEE") the entire right, ti	itle and interest for the United States ssues thereof; and all resulting pate	of America as defined in 35 U.	.S.C. 100, in the invention a	nd all applications including
any and an divisions, co	minuations, substitutes, and rep	ssues thereor, and all resulting pate	nis, known as		
TITLE OF	METHOD OF EAR	RICATING BRUSHES			
INVENTION	METHOD OF PAB	MICATING BRUSHES			ý .
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	for which the under	rsigned executed an appli	cation for Letters Pater	nts of the United Stat	es of America:
		Э арр	Samon to Louor of Blor	its of the officer offi	ico di Airierica,
NOTE → →	(A) 🛛 even date	herewith			
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line A, B and/or C	· · · · · · · · · · · · · · · · · · ·	oln No.		J	
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	AND the undersigned hereby a	uthorize(s) and request(s) the Unit	ed States Commissioner of Pat	ents and Trademarks to issu	ie said Letters Patent to the
said ASSIGNEE, for its	interest as ASSIGNEE, its succe	essors, assigns and legals represen	tatives; the undersigned agree(	(s) that the attorney of record	d in said application shall
hereinafter act on beha	IT OF SAID ASSIGNEE;	•			
essential by ASSIGNEE	to ASSIGNEE'S full protection	gree(s) to testify and execute any p and title in and to the invention here	apers for ASSIGNEE, its succe	essors, assigns and legal rep	presentatives, deemed
NOIE > >	The undersigned hereby author	rize(s) Pillsbury Winthrop LLP of the	above address to insert hereon	n any further identification n	ecessary or desirable for
recordation of this docur	nent.				
INVE	NTORS		DATE CIONED	WITHEOOFO	
1):	masami	Triemi	DATE SIGNED	WITNESSES	, , .
		, 50 0	Junes, 2001	Shiri	Usani
	ımi NIIMI	<del>1</del>	7	4.	
2)	- Stideti &	Chitave	June 11, 2001	Kenii C	gishima
	ki ICHIKAWA	1/ 1 2			
3)	Masahiro	Katoh	June 6 200	1 5/222	1)502
Name: Masa	hiro KATOH				/
4)					
Name:		W 3	<del></del>		
5)					* •
Name:				_	
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RECORDATION FORM COVER SHEET PATENT APPLICATIONS & PATENTS ONLY					
TO THE ASSISTANT COMMISSIONER OF PATENTS AND TRADEMARKS:					
SIR: PLEASE RECORD THE ATTACHED ORIGINAL DOCUMENTS OR COPY THEREOF.					
1. NAME OF CONVEYING PA	RTY(IES) (ASSIGNORS(S)):			0 2002	
Tadatoshi ASADA	.,,	2.	OIPE SEE 2		
3.		4.	าอาเมเก <b>เซ</b> โล	CENTER 2300	
5.		6.	FEB 1 5 2002 LL		
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ADDITIONAL NAME(S) OF CO	NVEYING PARTY(IES) ATTAC	8. HED? □YES ⊠NO			
			PRANCIARRE	<i>,</i> .	
2. PARTY(IES) (ASSIGNEE(S)	) RECEIVING INTEREST:	· · · · · · · · · · · · · · · · · · ·	CAS LICENIA		
NAME: DENSO CORPORATION	N .				
ADDRESS: 1-1, Showa-cho, Ka	ariya-city, Aichi-pref., 448-8661,	Japan	4		
	-				
ADDITIONAL NAME(S) & ADD	RESS(ES) ATTACHED? YE	S NO			
3. NATURE OF CONVEYANC	E (DOCUMENT):				
(Submit herewith only one d	ocument for recordation—multip	ole copies of same Assignm	nent signed by differ	ent inventors is one	
uocument)	<u>·</u>				
⊠ASSIGNMENT OF		EREST EXEC. D	ATE: July 2, 2001		
⊠ORIGINAL	FACSIMILE/PHOTOCOPY	İ	•		
CHANGE OF NAME	VERIFIED TRANSLATION				
SECURITYMERGER	OTHER:	*		-1-	
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ASSIGNMENT DIFFER SEE A	<u>i 1 Y!)</u> July 2, 2001	•		•	
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A. PAT. APP. NO.(S)   M#	1# INVENTOR		Л#	1st INVENTOR	
series code/serial no	if not in item 1			if not in item 1	
NEW APPLICATION 02826					
5. Name & Address of Party to	Whom Correspondence	6. NUMBER INVOLV	ED:		
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Pillsbury Winthrop LLP					
Intellectual Property Group		7. AMOUNT OF FEE B	:NCLUSED: (Code !	581)	
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Signature					
Attorney: Paul T. Bowen					
Reg. No. 38009		Date: August 7, 2001	•		
Atty/Sec: PTB/tel	TEL: (703) 905-2020	FAX: (703) 905			



Pillsbury Winthrop LLP

Intellectual Property Group 1100 New York Avenue, NW Ninth Floor Washington, DC 20005-3918 USA Patent Appln. Sole or Joint

For Inventions made o					
executed with or after	application				
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NONPROVISIONAL

# ASSIGNMENT OF NONPROVISIONAL APPLICATION

the undersigned, to	In consideration of the sum of Ten Dollars (\$10. o wit:	00) and other good and va	aluable consideration paid to each of
INSERT	(1) Tadatoshi ASADA		
NAME(S) OF	(3)	(2)	
INVENTOR(S)	(5)	(4)	
<b>\</b> -,			x box if continued on page 2
the receipt and suf and transfer(s) unto	ficiency of which are hereby acknowledged by to:	he undersigned who at th	e request of, hereby sell(s), assign(s)
INSERT	DENSO CORPORATION		
NAME(S) OF	1-1, Showa-cho, Kariya-city, Aichi-pref., 448	0001 lenen	
ASSIGNEE(S)	7 1, Chowa ono, Itanya-ory, Aloni-prei., 440	-ooo i Japan	
& ADDRESS(ES)			
(hereinafter designated "A	SSIGNEE") the entire right, title and interest for the United States	of America as defined in 35 U.S.C.	100, in the invention and all applications including
any and all divisions, conti	nuations, substitutes, and reissues thereof; and all resulting pate	nts, known as	and all applications including
TITLE OF INVENTION	VOLTAGE REGULATOR OF VEHICLE AC	GENERATOR	
<u>NOTE</u> → →	for which the undersigned executed an applic  (A) even date herewith	cation for Letters Patents o	of the United States of America:
(Complete	(B)		
line A, B and/or C)	(C) In U.S. Appln. No.	filed	
hereinafter act on behalf of AN essential by ASSIGNEE to	ID the undersigned hereby agree(s) to testify and execute any parts of the invention hereby agree(s) Pillsburg Winthrey LLP of the production and title in and to the invention hereby authorize(s) Pillsburg Winthrey LLP of the	alives; the undersigned agree(s) that appears for ASSIGNEE, its successors by transferred.	at the attorney of record in said application shall s, assigns and legal representatives, deemed
INVEN		DATE SIGNED	WITNESSES
1): <u>Tad</u>	atoshi asada	July 2- 200/	Object In the
	shi ASADA	2,2007	- Home Menine
2)	·		* **
Name:	X X		
3)			
Name:			
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Name:			
5)			
Name:			





RECORDATION EX	DO NOT USE FOR TRADEMARKS				
PATENT APPLICATION	RECORDATION FORM COVER SHEET PATENT APPLICATIONS & PATENTS ONLY				
TO THE ASSISTANT COMMISSIONER OF PATENTS AND TRADEMARKS					
SIR: PLEASE RECORD THE ATTACHED ORIGINAL DOCUME	NTS OR COPY THEREOF				
1. NAME OF CONVEYING PARTY(IES) (ASSIGNORS(S)):	20000000				
1. Naoto IWATA	2. Masayoshi FUJITA				
3. Masahiko NATUME	4. Yoshiaki MIZUNO O I POST CENTER 2800				
5. Nobuhiko NAGAI	6. Mitsutoshi MIYAZAKI				
7. Kunihiro KODAMA	10 = 100 (0)				
ADDITIONAL NAME(S) OF CONVEYING PARTY(IES) ATTACH	ED? TYES NO FEB 1 5 2002				
2. PARTY(IES) (ASSIGNEE(S)) RECEIVING INTEREST:					
NAME: Denso Corporation	ANDEMOD				
ADDRESS: 1-1, Showa-cho, Kariya-city, Aichi-pref. 448-0029 JA	PAN				
ADDITIONAL NAME(S) & ADDRESS(ES) ATTACHED? YES	⊠NO				
3. NATURE OF CONVEYANCE (DOCUMENT).					
(Submit herewith only one document for recordation—multiple	e copies of same Assignment signed by different inventors is one				
	designation organisa by unicient inventors is one				
	REST EXEC. DATE: 27 and 28 May 1998				
ORIGINAL FACSIMILE/PHOTOCOPY	25 Way 1550				
CHANGE OF NAME VERIFIED TRANSLATION					
SECURITY MERGER OTHER:	- A				
EXECUTION DATE(S) ON THE DECLARATION IF FILED HERE ASSIGNMENT DIFFER SEE ATTYL)	WITH: (NOTE: IF DATES ON DECLARATION AND				
Control of the contro					
4.5 APPL. NO.(S) OR PAT NO.(S). OTHERS ON ADDITIONAL	SHEET(S) attached? ☐YES ☒NO				
A. TALLACE, NO.(3)   M#   1st INVENTAB	B. PATENT NO(S) M# 1st INVENTOR				
series code/serial no if not in item 1	if not in item 1				
Div. of 09/092,646 281099					
5. Name & Address of Party to Whom Correspondence	6. NUMBER INVOLVED:				
Concerning Document Should be Mailed:	$APPLNS \underline{1} + PATS \underline{0} = TOTAL \underline{1}$				
Pillsbury Winthrop LLP					
Intellectual Property Group	7. AMOUNT OF FEE ENCLOSED: (Code 581)				
1600 Tysons Boulevard	ABOVE TOTAL x \$40 = \$40				
McLean, VA 22102					
5.5 ATTY DKT:	8. IF ABOVE FEE IS MISSING OR INADEQUATE CHARGE				
D 004000	INSUFFICIENCY TO DEPOSIT ACCOUNT NUMBER: 03-3975				
P 281099 U3-9812-YK-B	UNDER ORDER NO 60388 281099				
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	cover sheet, attachments and document 3				
- John M S	(do not file dup. Cover sheet)				
Signature O					
Attorney: Kenneth M. Fagin					
Reg. No. 37,615					
	Date: July 13 2001				
Atty/Sec: KMF/mll TEL: (703) 905-2066	Date: July 13, 2001 FAX: (703) 905-2500				

Please-return signed/recorded to: Cushman Darby & Cushman Intellectual Property Group of Pillsbury Madison & Sutro LLP Ninth Floor, East Tower 1100 New York Avenue, N.W. Washington, D.C. 20005-3918





For Inventions made outside USA executed with or after application

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#### NONPROVISIONAL

## ASSIGNMENT OF NONPROVISIONAL APPLICATION

USA Patent Appln. Sole or Joint

,	each of the und	In consideration of the sum of Ten Dolla dersigned, to wit:	ars (\$10.00) and other	good and valuable consideration paid to
	TRICTOR .	(1) Naoto IWATA	(4)	Yoshiaki MIZUNO
	INSERT NAME(S) OF INVENTOR(S)	(2) Masayoshi FUJITA	(5)	Nobuhiko NAGAI
	INVENIOR(S)	(3) Masahiko NATUME		ox if continued on page 2
	the receipt and assign(s) and tr	sufficiency of which are hereby acknowle		
	INSERT	DENSO CORPORATION		
	NAME(S) OF ASSIGNEE(S)	of 1-1, Showa-cho, Kariy	a-city, Aichi-pr	cef. 448-0029 Japan
	& ADDRESS(ES)			
	(hereinafter des U.S.C. 100, in ti thereof; and all	signated "ASSIGNEE") the entire right, titl the invention and all applications including resulting patents, known as	le and interest for the Ug any and all divisions,	Inited States of America as defined in 35 continuations, substitutes, and reissues
	TITLE OF INVENTION	TMPROVED METHOD FOR MACUI	NITNO CLORO TNI NO	OT DITAIN DEED
	L. V. L. VIII.	IMPROVED METHOD FOR MACHI		
		for which the undersigned executed an	application for Letters	Patent of the United States of America:
	NOTE → → (Complete	(A) X even date herewith		
	line A, B and/or C)	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1998	
		(C) in U.S. Appln. No. /	filed	
	successors, ass	AND the undersigned hereby authorize is to issue said Letters Patent to the said agais representatives; the undersigned agree on behalf of said ASSIGNEE; AND the undersigned hereby agree(s) is signs and legal representatives, deemed a invention hereby transferred. The undersigned hereby authorize(s) Common & Sutro, of the above address to inserting the invention inserting the source of the above address to inserting the inserting the same according to the sa	to testify and execute a essential by ASSIGNE	any papers for ASSIGNEE, its Et to ASSIGNEE'S full protection and
	1) Marme: Na	INVENTOR(S) note Lunta acto Iwata	DATE SIGNED 27-May-98	<u>WITNESSES</u> Junichi Qio
	2)	lasayeshi Fujita	28-May-98	Keiji Sahai
	3) 77 Name: Ma	rasahiko hatume asahiko Natume	28-may-98	Keiji Sakai
	4) $y$	Joshiaki Mizuno	28-May-98	Junichi Lio
	Name: No	obuhiko Nagai	27-May-98	Yoshitaka Kuroda
	IF ADDITIONA	L INVENTORS, check box X and con	tinue on page 2.	-





### ASSIGNMENT (Continued from page 1)

### LISTING OF ADDITIONAL INVENTORS

INSERT NAME(S) OF INVENTOR(S)

(6)	Mitsutoshi MIYAZAKI	(11)	
(7)	Kunihiro KODAMA	(12)	)
(8)	Toshiji KONDOU	(13)	
(9)		(14)	
(10)		(15)	

### SIGNATURES OF ADDITIONAL INVENTORS/WITNESSES/DATES SIGNED

	INVENTOR(S)	DATE SIGNED	WITNESSES
6) _	mitsutoshi miyazaki	27- may-98	Idisashi Kayano
Name: 7)	Kunihira Kodama	27-may-98	Hisashi Kayano
Name:	Kunihiro Kodama	>D 0m - 00	Kair Sohai
8) Name:	Joshiji Kondou Toshiji Kondou	28-11ay 98	Hisashi Kayano Keiji Sahai
9) Name:			
10) Name:			
11) Name:		× .	1
12) Name:			× × × × ×
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NAME: DENSO CORPORATION						
ADDRESS: 1-1, Showa-cho, Kariya-city, Aichi-pref.	., 448-8661 JA	PAN				
ADDITIONAL NAME(S) & ADDRESS(ES) ATTACH	IED? TYES	⊠NO				
3. NATURE OF CONVEYANCE (DOCUMENT)					-	
(Submit herewith only one document for recorda document)	ition—multiple	copies of same	e Assigr	nment sig	gned by differ	rent inventors is one
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### NONPROVISIONAL

## ASSIGNMENT OF NONPROVISIONAL APPLICATION

In consideration of the sum of Ten Dollars (\$10.00) and other good and valuable consideration paid to each of the undersigned, to wit:					
INSERT NAME(S) OF INVENTOR(S)	(1) Shigenobu NAKAMURA (3) (5)	(2			
the receipt and sufficiency of which are hereby acknowledged by the undersigned who at the request of, hereby sell(s), assign(s) and transfer(s) unto:					
INSERT NAME(S) OF ASSIGNEE(S) & ADDRESS(ES)	NAME(S) OF 1-1, Showa-cho, Kariya-city, Aichi-pref., 448-8661 Japan ASSIGNEE(S)				
(hereinafter designated "As any and all divisions, contin	SSIGNEE") the entire right, title and interest for the United States nuations, substitutes, and reissues thereof; and all resulting pater	of America as defined in 35 U.S.C	. 100, in the invention and all applications including		
TITLE OF INVENTION	BRUSHLESS AC GENERATOR				
	for which the undersigned executed an applic	eation for Letters Patents	of the United States of America:		
NOTE → → (Complete line A, B and/or C)	(A) ☐ even date herewith (B) ☑ on _ June 5, 2001		**************************************		
AND the undersigned hereby authorize(s) and request(s) the United States Commissioner of Patents and Trademarks to issue said Letters Patent to the said ASSIGNEE, for its interest as ASSIGNEE, its successors, assigns and legals representatives; the undersigned agree(s) that the attorney of record in said application shall and the undersigned hereby agree(s) to testify and execute any papers for ASSIGNEE, its successors, assigns and legal representatives, deemed essential by ASSIGNEE to ASSIGNEE's full protection and title in and to the invention hereby transferred.  NOTE  The undersigned hereby authorize(s) Pillsbury Winthrop LLP of the above address to insert hereon any further identification necessary or desirable for recordation of this document.					
2)	TORS Shigerobu Nahamura obu NAKAMURA	DATE SIGNED August 30, 2001	WITNESSES Hiroshi Ashida		
Name:					
Name: 4) Name:					
5) Name:					